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Charles Marvin Berteau

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INTELLECTUAL PROPERTY & STANDARDS
3400 W. PLANO PARKWAY, MS LEGL2
PLANO, TX 75075

EXAMINER

SIVJI, NIZAR N

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/599,893	Applicant(s) BERTEAU ET AL.	
	Examiner NIZAR SIVJI	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 October 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 August 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of the Claim

1. Claims 1 – 20 are currently pending in this application.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 17 – 20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. In accordance with the claimed language of claim 17 "An article comprising a machine-readable medium" which is directed to computer processing related claim. There is no clear and precise reference for an article comprising a machine-readable medium in the specification. In fact, the specification on page 15 defines "a machine readable storage device or in a propagated signal, which makes the claim does not fit within the definition of machine because a signal (e.g., carrier waves, propagated signal, infrared signals, digital signal, etc), a form of energy, does not fall within one of the four statutory classes of 101.

Claims 18- 20 are rejected as they are directly and or indirectly depended on rejected claim(s).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. Claims 1 – 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Palaez et al. Pub. No. 2004/0185836 in view of Houde et al. 5,978,678 and further in view of Lozano et al. Patent No. 5,982,869.

Regarding Claim 1, Palaez teaches receiving a call at a first node in a telecommunication network, wherein the first node includes at least one Media Gateway, the first node associated with a plurality of trunks (Para 8-10 and Fig. 1, a subscriber 10 places a telephone call to another subscriber, a subscriber associated with a wireless communication device 10, such as a cellular phone supported with radio access network and mobile switching center 14. A media gateway (MGW) 28, is connected to the RANs, mobile switching center 14, 20 and 26, and to the public switched telephone network (PSTN) 30. A central office telecommunications switch 34 is also coupled to the PSTN 30 and supports a telephone line connected to telephone 36). Identifying a interconnection with one of the plurality of trunks associated with the first node for routing the call (Fig. 1 and Para 8-11, RAN connected with MSC and with MGW and route the call based on call type). Palaez discloses further (Para 15-16) that

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routing a call based on routing information and number associated with subscriber 16 is used to route or reroute the call. The call can be routed via MSC 14 or call can be routed via MGW 28 but does not discuss further identifying a interconnection constraint relating to selection of a circuit associated with one of the plurality of trunks associated with the first node for routing the call; inputting the call into a Mobile Switching Center server to derive a number translation and routing the call to a trunk in accordance with the interconnection constraint. However, Houde discloses incoming call at the first node where the first node is associated with the plurality of trunk (Fig. 1, Col 3 L 10-40, Col 4 L 14 – 65). The switching node 14 is connected to a home location register data base 22. The HLR data base stores information concerning the assigned subscriber mobile station 16 comprising location information and Service information refer to as interconnection constraint. Further, Houde teaches that, when a call 200 is dialed to the home directory number of the internationally roaming mobile station 16(1) originates from another cellular subscriber or the public switched telephone network (PSTN) and is received at one of the switching nodes 14 (i.e., gateway node) of the first country cellular network 12(e.g., Canada or France). The home location register 22 processes (action 204) the location request signal, in view of the previously received registration notification signal 104, to determine the location (e.g., constraint) (i.e., serving switching node 34 within the second country cellular network 32) of the called mobile station 16(1). The home location register 22 then signals the serving switching node 34 for the called mobile station 16(1) (over signaling links 18 and 24, through international gateway 50, and over signaling link 40) with a routing request signal 206 to route the

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call. This routing request signal may comprise an IS-41 ROUTEREQ signal or other equivalent standardized or proprietary message. Responsive to the signal 206, the serving switching node 34 assigns (action 208) a temporary local directory number (TLDN) to the international roaming mobile station 16(1), and sends a routing request return result signal 210 including the assigned temporary local directory number to the home location register 22 via the international gateway 50. From processing of the previously stored switching node identification for switching node 34, the home location register identifies the country where that node (34) is located and retrieves (action 212) its country code (CC) designation. The country code and returned temporary local directory number are then appended to the proper international dialing access digits (IDAD) to form (action 214) the international number for contacting the called international roaming mobile station 16(1). It will be noted that if the returned temporary local directory number does not include a city code, this may also be determined from processing the switching node identification number and then appended by action 214 at the proper location to complete the international number. It will further be noted that the subscriber owning the international roaming mobile station 16(1) may further have a long distance carrier preference, and in such instances the carrier code for that preferred carrier is also appended by action 214 at the proper location to complete the international number. (Col 5 L5 - L53). Houde further teaches that the carrier code may be translated (action 222) refer to as translating a received call by the international gateway 50 to designate a particular long distance carrier for use in routing the call from the international gateway to the switching node 34 (Col 5 L 1 Col 6 L 17). Therefore, it

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is obvious to one having ordinary skill in the art at the time the invention was made that identifying a interconnection constraint relating to selection of a circuit associated with one of the plurality of trunks associated with the first node for routing the call; inputting the call into a Mobile Switching Center server to derive a number translation and routing the call to a trunk in accordance with the interconnection constraint as per teaching of Houde so as to route the call based on pre-set preferences. Palaez and Houde differ from the claimed invention in not specifically teaching identifying a route index related to a route list that includes a sequence of routing rules for routing the call. However, Lozano teaches the system and method for automatically configuring routing for international telephone calls in a telecommunications system having a hierarchy of switches. Lozano teaches a set of routing rules to route international telephone calls through the hierarchy of switches. A routing generator applies data stored in a computer to the rules to generate the routing. The data is stored in configuration tables called network description tables. The network description tables contain information describing network topology. Operating on the network description data stored in the network description tables, the rules generate routing tables. The routing tables provide routing information to route telephone calls through the switch hierarchy(Col 2 l 60 – Col 3 L 10). Therefore, it is obvious to one having ordinary skill in the art at the time the invention was made that identifying a route index related to a route list that includes a sequence of routing rules for routing the call as per teaching of Lozano so as to automatically configure a network's routing to route telephone calls through a network to a gateway switch.

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As Per Claim 2, Houde teaches further wherein the first node comprises one of a plurality of IO nodes (e.g., switches) operable to handle bearer traffic, each of the plurality of nodes operating under control of a server using signaling traffic associated with the bearer traffic (Col 4 L 3 – 6).

As Per Claim 3, Houde further teaches wherein the constraint relates to one of a preference or a restriction against routing the call through an interconnection with another of the plurality of nodes (Col 4 L 14 - 20).

As Per Claim 4, Houde teaches further wherein the constraint is defined in a set of routing rules based on data relating to the call (Col 6 L 5 – 53).

As Per Claim 5, Houde teaches further wherein the server controls routing of the call to a trunk (Col 6 L 20 - 30).

As Per Claim 6, Houde teaches further wherein the preference comprises: selecting a circuit associated with the first node for routing the call if a circuit associated with the first node is available (Col 6 L 36 – 45).

As Per Claim 7, Houde teaches further wherein the restriction comprises precluding selection of a circuit associated with one of the plurality of nodes other than the first node (Col 6 L 20 - 35).

As Per Claim 8, Houde teaches further wherein each of the plurality of trunks is associated with a plurality of circuits and each node is associated with at least one circuit for each trunk (Col 2 L 20 – 55, Col 6 L 5 – 53).

As Per Claim 9, Houde teaches further wherein at least two of the nodes serve an overlapping geographical area (Col 3 L 10 – 15).

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As Per Claim 10, Houde teaches further wherein at least two of the nodes serve different geographical areas(Col 3 L 10 – 15).

Regarding Claim 11, Palaez discloses a distributed mobile switching center (Fig. 1), including: a plurality of media gateways, each media gateway associated with a plurality of trunks (Fig. 1, Para 8 and 11, and Unit 28 and 32, having plurality of trunks). Palaez discloses further (Para 13-16) that routing a call based on routing information and number associated with subscriber 16 is used to route or reroute the call. The call can be routed via MSC 14 or call can be routed via MGW 28. Further, Palaez discloses that MSC control routing for the plurality of media gateway as shown in Fig. 1. Palaez differ from claimed invention in not specifically teaching the interconnection constraint relating to selecting a circuit associated with a terminating trunk for a call based on at least the media gateway receiving the call. However, Houde teaches that a call 200 dialed to the home directory number of the internationally roaming mobile station 16(1) originates from another cellular subscriber or the public switched telephone network (PSTN) and is received at one of the switching nodes 14 (i.e., gateway node) of the first country cellular network 12(e.g., Canada or France). The home location register 22 processes (action 204) the location request signal, in view of the previously received registration notification signal 104, to determine the location (e.g., constraint) (i.e., serving switching node 34 within the second country cellular network 32) of the called mobile station 16(1). The home location register 22 then signals the serving switching node 34 for the called mobile station 16(1) (over signaling links 18 and 24, through international gateway 50, and over signaling link 40) with a routing request signal 206 to route the call. This

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routing request signal may comprise an IS-41 ROUTEREQ signal or other equivalent standardized or proprietary message. Responsive to the signal 206, the serving switching node 34 assigns (action 208) a temporary local directory number (TLDN) to the international roaming mobile station 16(1), and sends a routing request return result signal 210 including the assigned temporary local directory number to the home location register 22 via the international gateway 50. From processing of the previously stored switching node identification for switching node 34, the home location register identifies the country where that node (34) is located and retrieves (action 212) its country code (CC) designation. The country code and returned temporary local directory number are then appended to the proper international dialing access digits (IDAD) to form (action 214) the international number for contacting the called international roaming mobile station 16(1). It will be noted that if the returned temporary local directory number does not include a city code, this may also be determined from processing the switching node identification number and then appended by action 214 at the proper location to complete the international number. It will further be noted that the subscriber owning the international roaming mobile station 16(1) may further have a long distance carrier preference, and in such instances the carrier code for that preferred carrier is also appended by action 214 at the proper location to complete the international number. (Col 5 L5 - L53). Therefore, it is obvious to one having ordinary skill in the art at the time the invention was made that the constraint relating to selecting a circuit associated with a terminating trunk for a call based on at least the media gateway receiving the call as per teaching of Houde so as to route the call based on pre-set preferences. Palaez

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and Houde differ from the claimed invention in not specifically teaching identifying a route index related to a route list that includes a sequence of routing rules for routing the call. However, Lozano teaches the system and method for automatically configuring routing for international telephone calls in a telecommunications system having a hierarchy of switches. Lozano teaches a set of routing rules to route international telephone calls through the hierarchy of switches. A routing generator applies data stored in a computer to the rules to generate the routing. The data is stored in configuration tables called network description tables. The network description tables contain information describing network topology. Operating on the network description data stored in the network description tables, the rules generate routing tables. The routing tables provide routing information to route telephone calls through the switch hierarchy (Col 2 l 60 – Col 3 L 10). Therefore, it is obvious to one having ordinary skill in the art at the time the invention was made that identifying a route index related to a route list that includes a sequence of routing rules for routing the call as per teaching of Lozano so as to automatically configure a network's routing to route telephone calls through a network to a gateway switch.

As Per Claim 12, Houde teaches further wherein the plurality of media gateways comprise a cluster of media gateways having interconnection between media gateways in the cluster and the constraint providing at least one of a preference or a restriction against routing the call through the interconnection (Col 4 L 14 - 20).

As Per Claim 13, Houde teaches further wherein each of the plurality of trunks is associated with a plurality of circuits and each media gateway in the cluster is

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associated with at least one of the circuits for each of the plurality of thinks(Col 2 L 20 – 55, Col 6 L 5 – 53).

As Per Claim 14, Houde teaches further wherein the call is associated with a particular circuit associated with an originating trunk and the media gateway receiving the call is associated with the particular circuit (Col 6 L 18 – 24).

As Per Claim 15, Houde teaches further wherein the restriction comprises precluding selecting a circuit associated with one of the plurality of media gateways other than the media gateway receiving the call and the preference comprises:

selecting a circuit associated with the media gateway receiving the call if a circuit associated with the media gateway receiving the call is available(Col 6 L 20 - 35); and allowing use of a circuit associated with a particular other one of the plurality of media gateways through an interconnection with the particular media gateway if a circuit associated with the media gateway receiving the call is not available(Col 6 L 36 – 45).

As Per Claim 16, Houde further teaches wherein the server handles signaling traffic for the distributed mobile switching center and the plurality of media gateways handle bearer traffic for the distributed mobile switching center (Col 4 L 3 – 6).

Regarding Claim 17, Palaez discloses receive data indicating receipt of a call at a first node of a plurality of nodes in a telecommunication network, the first node associated with a plurality of trunks, the call received on an originating trunk of the plurality of trunks, and the plurality of nodes providing switching operations under the control of a call server(Fig 1). Palaez differs from the claimed invention in not specifically teaching identifying a interconnection constraint relating to selection of a circuit associated with

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one of the plurality of trunks associated with the first node for routing the call; inputting the call into a Mobile Switching Center server to derive a number translation and routing the call to a trunk in accordance with the interconnection constraint. However, Houde teaches the cellular network 12 portion of the international network 10 includes a plurality of interconnected switching nodes (SN) 14 under the control of the switching device (Col 3 L 10 – 55). Houde further teaches that the carrier code may be translated (action 222) refer to as translating a received call by the international gateway 50 to designate a particular long distance carrier for use in routing the call from the international gateway to the switching node 34 (Col 5 L 1 Col 6 L 17). Further, Houde teaches that a call 200 dialed to the home directory number of the internationally roaming mobile station 16(1) originates from another cellular subscriber or the public switched telephone network (PSTN) and is received at one of the switching nodes 14 (i.e., gateway node) of the first country cellular network 12(e.g., Canada or France). The home location register 22 processes (action 204) the location request signal, in view of the previously received registration notification signal 104, to determine the location (e.g., constraint) (i.e., serving switching node 34 within the second country cellular network 32) of the called mobile station 16(1). The home location register 22 then signals the serving switching node 34 for the called mobile station 16(1) (over signaling links 18 and 24, through international gateway 50, and over signaling link 40) with a routing request signal 206 to route the call. This routing request signal may comprise an IS-41 ROUTEREQ signal or other equivalent standardized or proprietary message. Responsive to the signal 206, the serving switching node 34 assigns (action 208) a

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temporary local directory number (TLDN) to the international roaming mobile station 16(1), and sends a routing request return result signal 210 including the assigned temporary local directory number to the home location register 22 via the international gateway 50. From processing of the previously stored switching node identification for switching node 34, the home location register identifies the country where that node (34) is located and retrieves (action 212) its country code (CC) designation. The country code and returned temporary local directory number are then appended to the proper international dialing access digits (IDAD) to form (action 214) the international number for contacting the called international roaming mobile station 16(1). It will be noted that if the returned temporary local directory number does not include a city code, this may also be determined from processing the switching node identification number and then appended by action 214 at the proper location to complete the international number. It will further be noted that the subscriber owning the international roaming mobile station 16(1) may further have a long distance carrier preference, and in such instances the carrier code for that preferred carrier is also appended by action 214 at the proper location to complete the international number. (Col 5 L5 - L53). Therefore, it is obvious to one having ordinary skill in the art at the time the invention was made that identifying a interconnection constraint relating to selection of a circuit associated with one of the plurality of trunks associated with the first node for routing the call; inputting the call into a Mobile Switching Center server to derive a number translation and routing the call to a trunk in accordance with the interconnection constraint as per teaching of Houde so as to route the call based on pre-set preferences. Palaez and Houde differ from the

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claimed invention in not specifically teaching identifying a route index related to a route list that includes a sequence of routing rules for routing the call and the medium to store data. However, Lozano teaches the system and method for automatically configuring routing for international telephone calls in a telecommunications system having a hierarchy of switches. Lozano teaches a set of routing rules to route international telephone calls through the hierarchy of switches. A routing generator applies data stored in a computer to the rules to generate the routing. The data is stored in configuration tables called network description tables. The network description tables contain information describing network topology. Operating on the network description data stored in the network description tables, the rules generate routing tables. The routing tables provide routing information to route telephone calls through the switch hierarchy (Col 2 l 60 – Col 3 L 10). Further, (Col 13 L 10 – 35) discloses medium to store software or data. Therefore, it is obvious to one having ordinary skill in the art at the time the invention was made that identifying a route index related to a route list that includes a sequence of routing rules for routing the call and a medium to storing instruction as per teaching of Lozano so as to automatically configure a network's routing to route telephone calls through a network to a gateway switch.

As Per Claim 18, Palaez further teaches wherein the constraint comprises a limitation on routing the call through an interconnection with another of the plurality of nodes (Fig. 1).

As Per Claim 19, Palaez further teaches wherein the constraint is included in a set of routing rules assigned to the call and the constraint is associated with the first node (

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Fig. 1 Unit 14).

As Per Claim 20, Houde further teaches wherein each of the plurality of trunks is associated with a plurality of circuits, and each node is associated with at least one circuit for each trunk (Col 2 L 20 – 55, Col 6 L 5 – 53).

Response to Arguments

Applicant's arguments with respect to claim 1- 20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Cyr et al – Pub. No. 2004/0204095 teaches IP Multimedia Subsystem component providing of PSTN to serving MSC feature server

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NIZAR SIVJI whose telephone number is (571)270-7462. The examiner can normally be reached on 7:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on (571) 272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George Eng/
Supervisory Patent Examiner, Art Unit 2617

/NIZAR SIVJI/
Examiner, Art Unit 2617